



Pre-Proposal Workshop

2011 Emerging Technology Demonstration Grant Program (ETDG II)

PIER Industrial, Agriculture and Water (IAW) Program
California Energy Commission
October 31st, 2011

Agenda



- Welcome and Introduction
- PIER Program
- PON Background
- Overview of Grant Solicitation Application Manual
- Questions and Answers

Housekeeping



- ...In case of fire
- ...Local facilities
- ...IAW and Workshop team
- ...Muting of WebEx during presentation
- ...Q&A protocol

Solicitation Docs



Solicitation documents for Emerging Technology Demonstration Grant Program (ETDG II)

<http://www.energy.ca.gov/contracts/pier.html#PON-11-501>

- Please make sure to read all three addendums.
- **Addendum 3** has the revised PON application manual that supersedes the original manual released in August.

PIER Program



- Ratepayer funded program started in 1996 and administered by the Energy Commission
- 2010/2011 annual appropriation
 - \$62.5 million from investor-owned electric utility ratepayers
 - \$24 million from natural gas ratepayers
 - Approximately \$7 million of this total for industrial, agricultural and water efficiency projects
- Purpose: Fund “public interest” energy RD&D efforts not adequately provided by competitive and regulated markets.

PIER Program



PIER funding efforts are focused on the following RD&D research areas:

- Industrial, Agricultural and Water End-Use Energy Efficiency (IAW)
- Buildings End-Use Energy Efficiency
- Energy-Related Environmental Research
- Energy Technology Systems Integration
- Renewable Energy Technologies
- Transportation Research

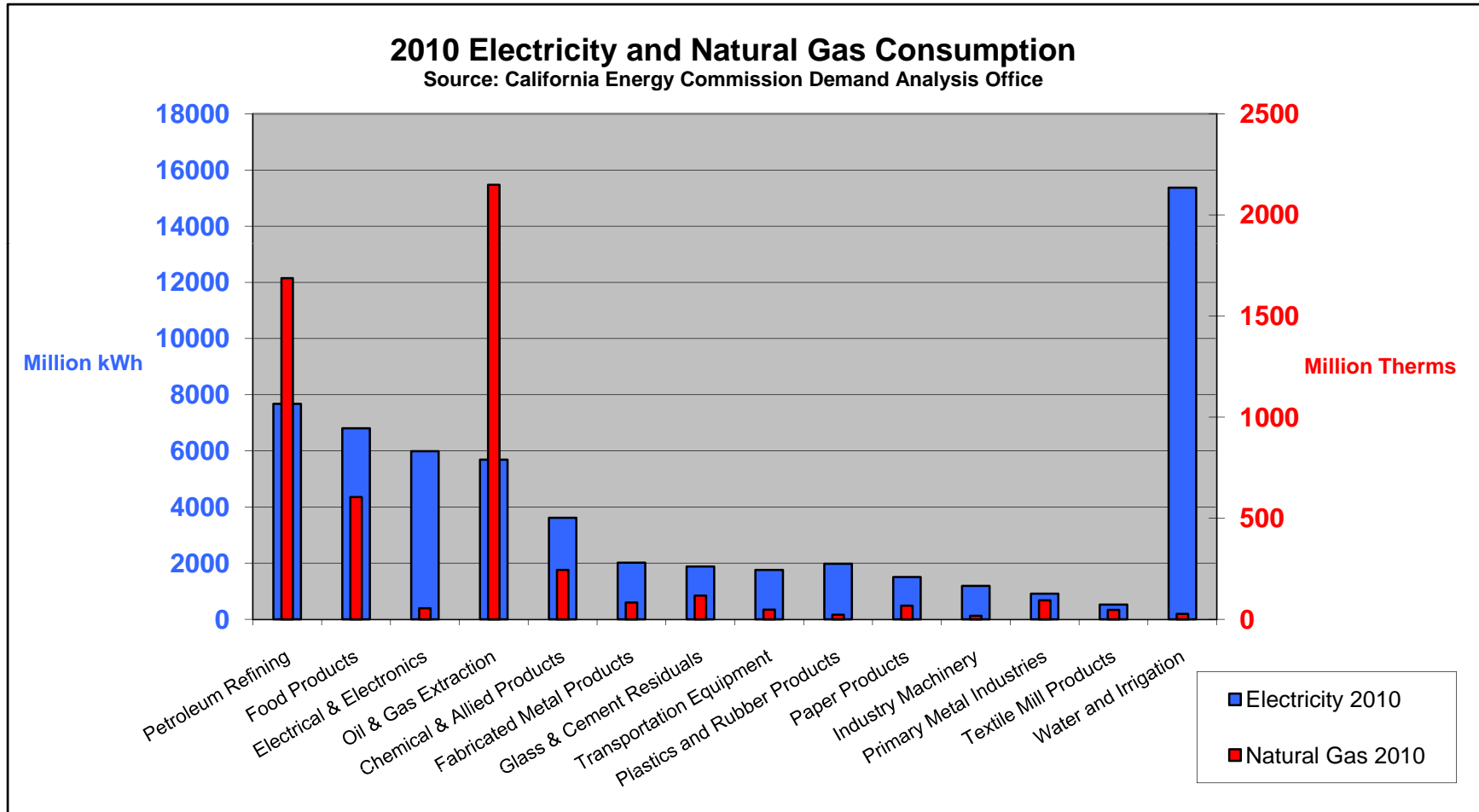
<http://www.energy.ca.gov/research/index.html>

IAW Program



- The PIER Industrial, Agricultural, and Water Efficiency (IAW) program facilitates research and demonstration projects to reduce energy consumption in California's:
 - Industrial facilities and processes
 - Agricultural operations
 - Water and wastewater treatment facilities
- The program seeks
 - To improve process-related energy economics
 - Reducing environmental pollution
 - Meet energy needs in a sustainable manner

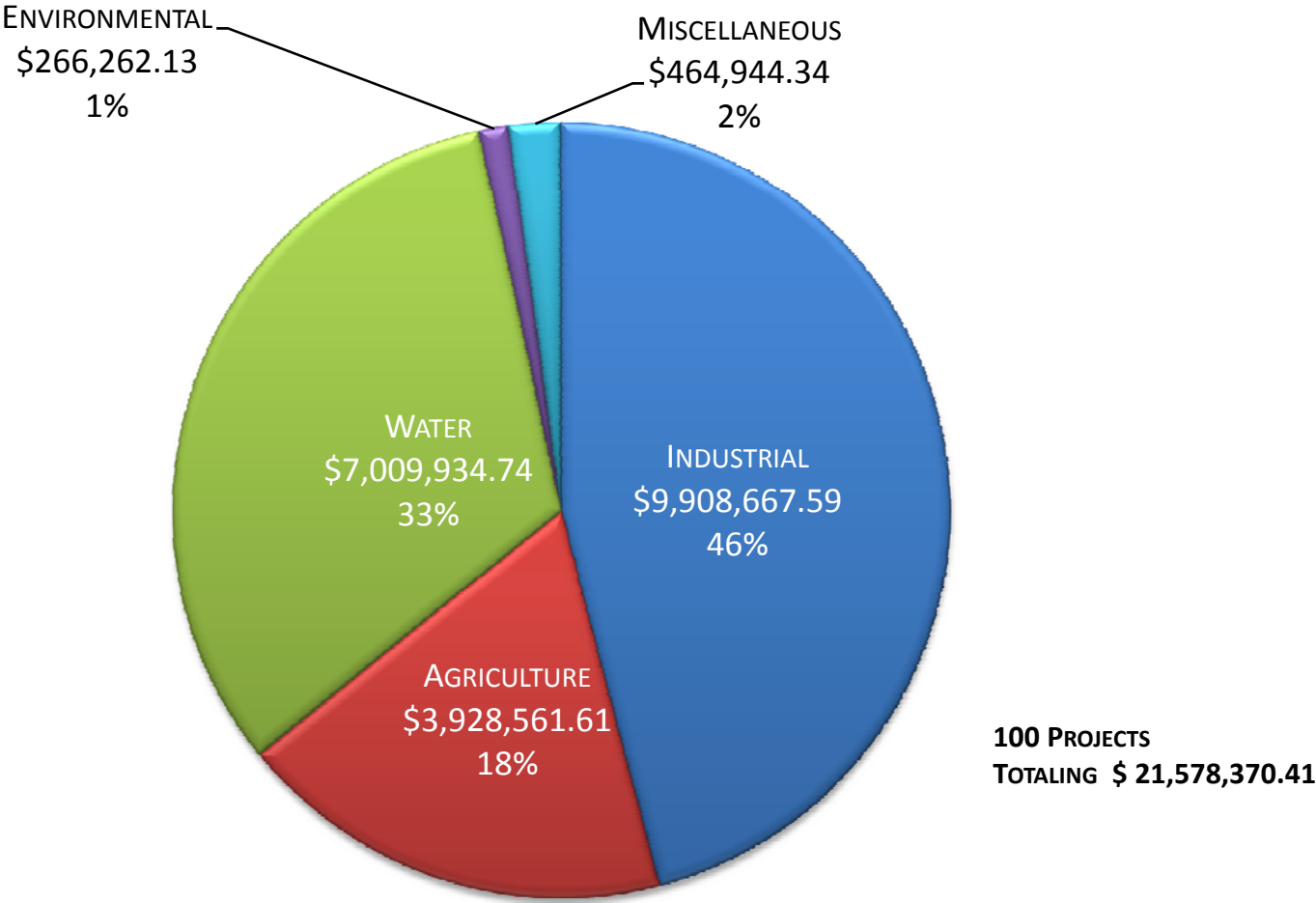
IAW Research Priorities



2005-2010 Funded Research



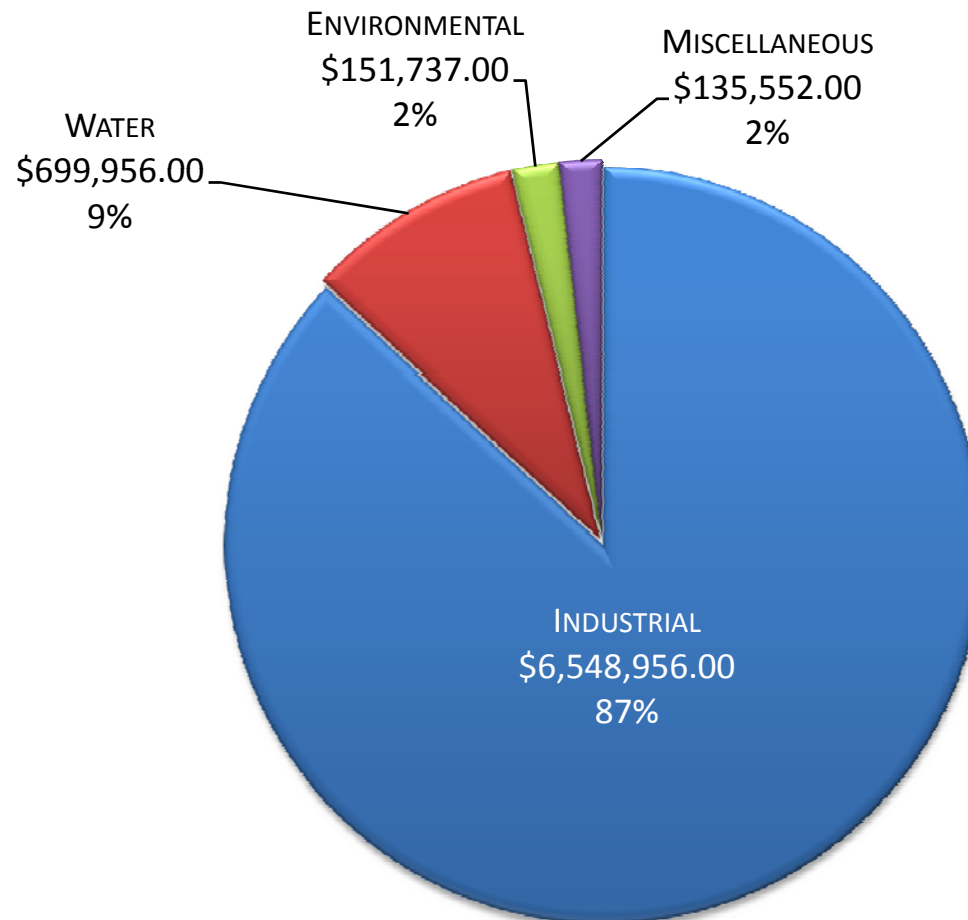
**PIER IAW Funding- Electric
2005-2011**



2005-2010 Funded Research



PIER IAW Funding- Natural Gas 2005-2011



21 PROJECTS
TOTALING \$ 7,536, 201.00

ETDG I Results



- 56 Abstracts submitted
- 32 Passed Stage 1
- 29 Proposals Submitted
 - 19 Passed scoring and awarded (\$400k Max Award)
 - Industrial – 3
 - Data Centers – 4
 - Electric Storage – 3
 - Water and Waste Water – 9
- \$5.75M in PIER Funds and \$5.21M in Match Funds
- Note: Participation in ETDG I is **NOT** a prerequisite for ETDG II.

ETDG II Solicitation Background



- The solicitation seeks emerging electricity and natural gas energy efficiency technologies in the following areas (see Attachment F):
 - Industrial Energy Efficiency / Demand Reduction
 - Water and Wastewater
 - Data Centers
 - Customer-Side Electricity Storage
- Seeking projects that:
 - Are past the “proof-of-concept” stage
 - Have had a convincing laboratory-scale or a pilot-scale demonstration
 - Are now ready to be demonstrated in real-world conditions in an industrial setting

ETDG II Solicitation Background



- Demonstration will be partially funded by the PIER program
- Measurement and Verification (M&V) will be conducted by an independent third-party entity that **must be part of Applicant's project team.**
- Proven technical and economic performance to the utilities' specifications and satisfaction could make these technologies eligible for future utility energy efficiency rebate program(s).
- Utility rebates can expedite customer acceptance and market development.
- After a successful demonstration at an industrial site, there **must be plans to deploy the demonstrated technology within 1-2 years.**

Eligible Projects for ETDG II



- Eligible projects must be in one of the following categories: Industrial, Water and Wastewater, Data Centers and Electric Energy Storage (see Attachment F).
- Eligible technologies must:
 - Not duplicate existing technologies/projects (see Attachment O for past IAW projects)
 - Be past the “proof-of-concept” stage
 - Have a convincing laboratory-scale or a pilot-scale demonstration
 - Is now ready to be demonstrated in an industrial setting **in an investor-owned utility (IOU) territory**
 - Overcome technological barriers to meeting state policy goals
- Proposal(s) must provide a market connection for the proposed technology and quantify the benefits to electricity and/or natural gas ratepayers in California.

Eligible Applicants



- This is an open solicitation seeking proposals from public, private and individual entities actively involved in energy efficiency research and development with an emphasis on demonstration.
- Applicants must agree to use the [PIER Terms and Conditions](#).
- To be eligible, applicants must present a team with demonstrated capabilities to successfully complete technology research, development and demonstration projects.

Eligible Applicants



- **Individuals:** Must be acting independently. If employed or affiliated with an organization, applicant must have authorization from the organization to pursue project development independently as an individual with no rights reverted to the organization.
- Note - Applicants who are employed by a college/university or affiliated laboratory are not eligible to apply as individuals; submission for such employees must be made through the proposer's affiliated institution.

CBE (Attachment I)



Pursuant to AB 2267 (Fuentes, 2008), the California Energy Commission's Public Interest Energy Research (PIER) Program must give a priority to "California based entities" (CBEs) when making awards.

An entity must meet all of the following requirements to be considered a CBE:

- A CBE is a corporation or other business form organized for the transaction of business that:
 - Either has its headquarters **OR** an office in California **AND**
 - Substantially manufactures the product **OR** substantially performs the research within California that is the subject of the award.
- The proposal must include, at a minimum, a CBE as either the prime contractor / recipient or as a subcontractor.

CBE Requirements (Stage 1)



- Priority given to "California-Based Entities" (CBEs)
- The abstract must commit and plan for CBEs to receive 51% or greater of the PIER funds awarded through this grant solicitation. (See Attachment G, Item 11)
 - This is a Pass/Fail criterion!

CBE Requirements (Stage 2)



- This solicitation is designed to maximize economic investment in California by giving preference to **CBEs** and for the **spending of PIER funds in California**.
- For Stage 2 submission, Applicants are highly encouraged to review Attachment H, Section 2, Criterion 7 “Economic Investment in California.”
- To earn points in this category, the proposal must **document how the project will spend PIER funds in California**.

Funding Information



- Up to \$14 million of PIER funding is available under this solicitation for grant awards.
- Maximum amounts by Fiscal Year:
 - 2010/11: \$5.23M in Electricity and \$3.42M in Natural Gas
 - 2011/12: \$2.55M in Electricity and \$2.80M in Natural Gas
 - Total Electric and Natural Gas funds are \$7.78M and \$6.22M

Project Funding Limits:

- Applicants may request no less than **\$750,000**
- Applicants may request no more than **\$2,000,000**

Funding Information



- All work must be **completed by March 30, 2015** to allow for completion of all administrative project close-out activities.
- In case of a high number of exceptional, desirable projects, the program may release additional funds upon approval from the PIER Program Management.

Project Match Funds



- Cost-sharing is required and is a consideration in the evaluation process.
- Match funding of at least **25%** of the requested PIER funding is **required in cash**. “Cash” is defined as equipment, materials, travel, information technology (IT) services, and subcontractor costs.
- Please note that “cash” does not include “in-kind” prime labor, which is allowable but not incentivized.
- Proposals with **higher match funding** are desirable and **will be scored higher**.

Selection and Award Process



This grant solicitation will follow a **two-stage selection process**:

- The **first stage** is a request for qualifications, which consists of a maximum six (6) page project abstract plus additional documents that will be scored on a pass/fail basis.
- Applicants must follow the abstract format instructions and include **all elements** in Attachment G.
- If the abstract passes the first stage selection process, the Applicant will be invited to progress to the **second stage** involving submission of a complete formal proposal.

Stage 1



- The first stage screens for technologies that are **past the proof-of-concept stage** and are ready for a real world demonstration. Applicants whose Stage 1 submissions pass are invited to submit a formal proposal for the Stage 2.
- Stage 1 also provides a preliminary assessment of the applicant's ability to secure a demonstration site, necessary match funds and **third party M&V**.
- The ability to procure a suitable **demonstration site** is an important requirement that must be met to both participate in this grant solicitation and receive funding for a submitted proposal.

Stage 1



- Six (6) page abstract submitted by Applicants:
 - **Due November 21st, 2011 by 4:00 p.m.**
- A scoring committee will score each abstract on a Pass/Fail basis using scoring criteria in Attachment G.
- Only those Applicants whose abstracts have **passed** Stage 1...
 - will be invited to submit a **formal proposal** (Stage 2)

Stage 2



Formal Proposal submitted by Applicants:

– **Due January 20th, 2012 by 4:00 p.m.**

1. A scoring committee will:

- Screen submitted proposals according to Section 1 of Attachment H.
Proposals must pass Section 1 screening to proceed to Section 2.
- Score submitted proposals using the scoring criteria in Section 2 of Attachment H.

2. A minimum score of **700 out of 1000** is required to be eligible for funding. Passing proposals will be ranked based on overall score.

Stage 2



3. The Energy Commission's Executive Director or designee will recommend how far down the ranked list of passing proposals to make awards.
4. A Notice of Proposed Awards will be released.
5. Projects recommended for funding will be heard at an Energy Commission Business Meeting.

Stage 2



- 6. The Energy Commission will be the last entity to approve (sign) the Grant Agreement.
- It is anticipated that the entire process, from abstract submission to fully executed Grant Agreement, will take approximately 9 months.

Schedule of Grant Award Process



Release of Program Opportunity Notice	August 26th, 2011
Proposal Workshop (via in person participation, teleconference, WebEx)	October 31st, 2011
Deadline to Submit Questions	November 4th, 2011
Post Questions and Answers to Website	Estimated November 10th, 2011
Deadline to Submit 6 page Abstracts (Stage 1)	November 21st, 2011 by 4:00 p.m.
Posting of Stage 1 Results	Estimated December 14th, 2011
Deadline to Submit Proposals (Stage 2)	January 20th, 2012 by 4:00 p.m.
Interview Applicants (if necessary)	Estimated February 2012
Post Notice of Proposed Awards (NOPA)	Estimated March 2012
Approval of Awards at Energy Commission Business Meetings	Estimated starting June 2012

Confidential Information



No confidential information will be accepted during the proposal and selection phase of this solicitation, either in Stage 1 abstracts or Stage 2 formal proposals.

If any confidential information is submitted, the entire proposal will be rejected and will be ineligible for funding.

Abstract Submission



One (1) original and six (6) copies of the abstract and a CD containing all abstract documents **no later than:**

November 21st, 2011 by 4:00 p.m.

Mail completed abstracts to:

California Energy Commission
Grants and Loans Office
Attn: ETDG II Program
1516 Ninth Street, MS-1
Sacramento, CA 95814

Final Proposal Submission



One (1) original and six (6) copies of the grant application and a CD containing all the documents **must be received no later than:**

January 20th, 2012 by 4:00 p.m.

Mail completed grant applications to:

California Energy Commission
Grants and Loans Office
Attn: ETDG II Program
1516 Ninth Street, MS-1
Sacramento, CA 95814

Attachments F, G, H and J



- Overview of Attachment F
- Overview of Attachment G
- Overview of Attachment H (Sections 1 and 2)
- Overview of Attachment J

Questions and Answers

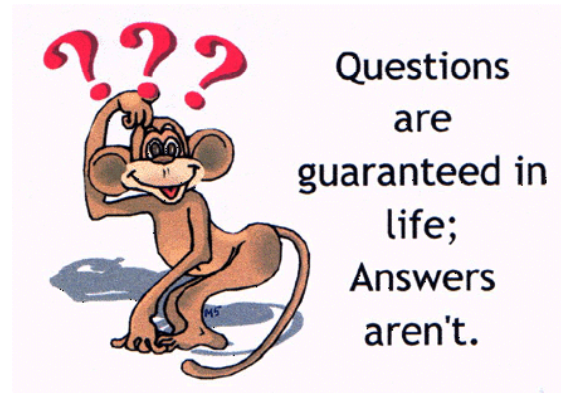


Please send all PON related questions to
Crystal at:

- Crystal Presley-Willis
Cpresley@energy.state.ca.us

IAW staff contact information:

- Kiel Pratt
KPratt@energy.state.ca.us
- Anish Gautam, P.E.
ACGautam@energy.state.ca.us



IOU Contacts



- Pacific Gas and Electric
 - Randy Wong, RKW1@pge.com
 - John Mejia, jzmq@pge.com
- Southern California Edison
 - Paul Delaney, Paul.Delaney@sce.com
- Sempra (San Diego Gas & Electric, Southern Cal. Gas)
 - A.Y., Ahmed, ahmed1@semprautilities.com
 - Steven Q. Ly, sqlly@semprautilities.com
- Emerging Technologies Coordinating Council
 - <http://www.etcc-ca.com>

ETDG 1 Numbers



- Stage 1 (56 abstracts)
 - 32 Passed
 - Industrial – 12 Projects (\$4.5M, \$4.9M match)
 - Data Center – 7 Projects (\$2.2M, \$0.7M match)
 - Energy Storage – 4 Projects (\$1.6M, \$1.6M match)
 - Water and Wastewater – 9 Projects (\$3.1M, \$10.2M match)
 - Total PIER - \$11.4M with \$17.4M in match
- Stage 2 (29 Proposals)
 - 19 Passed
 - Industrial – 3 Projects (\$1.1M, \$1.3M match)
 - Data Center – 4 Projects (\$1.3M, \$0.5M match)
 - Energy Storage – 4 Projects (\$1.2M, \$2.7M match)
 - Water and Wastewater – 9 Projects (\$3.1M, \$10.2M match)
 - Total PIER - \$6.89M with \$15M in match